Project Design Phase-II

Technology Stack(Architecture &Stack)

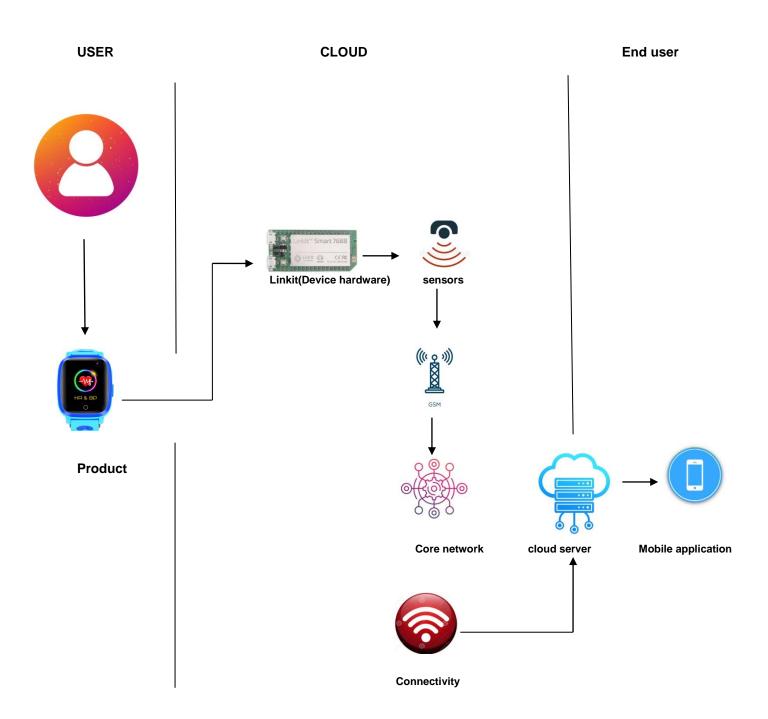| Date	16 October 2022
Team ID	PNT2022TMID47693
Project Name	Project - IoT Based Safety Gadget For Child Safety Monitoring and Notification
Maximum Marks	4 Marks

USER   **CLOUD**   **End user**

Table-1:Components &Technologies:

S.NO	Component	Description	Technologies
1.	User interface	How user interacts with application e.g. Web UI, Mobile App	HTML,CSS,JAVASCRIPT
2.	Application Logic-1	Logic for a process in the application	C++,python
3.	Application Logic -2	Logic for a process in the application	IBM Watson STT service
4.	Application Logic -3	Logic for a process in the application	IBM Watson Assistant
5.	Sensing and embedded components	It forms back bone of the entire IOT network	Linkit ,Raspberry pi Emerging sensors
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloud and etc.
7.	File Storage	Database Service on Cloud	IBM Block Storage or Other Storage Service or Local File system
8.	External API-1	Purpose of External API used in the application	IBM Weather API, etc
9.	Location	Global system mobile combination The universal availability of mobile networks makes GSM tracking devices a powerful alternative to GPS	GSM
10.	Movement detection	Body position is determined by a triple axis accelerometer	Accelerometer
11.	Infrastructure(server/cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry

Table -2 Application Characteristics:

S.NO	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Node red, device hive
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	High-end CC EAL6+ (high) certified security controller
3.	Scalable Architecture	Justify the scalability of architecture	Python micro server framework
4.	Availability	Justify the availability of application	low-energy Bluetooth, low-energy wireless
5.	Performance	Design consideration for the performance of the application	Back office application Such as CRM